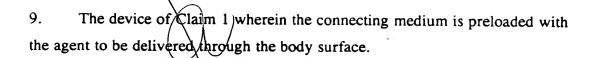
CLAIMS:

A device for introducing or withdrawing an agent through a body surface, comprising:

a member having a plurality of protrusions extending from a body surface contacting side of the member; and

a connecting medium capable of storing the agent therein or passing the agent therethrough on at least a portion of the body surface contacting side of the member.

- The device of Claim 1 wherein the member has an opening therethrough. 2.
- 3. The device of Claim 2 wherein the connecting medium extends across the opening.
- The device of Claim 2 wherein the connecting medium extends through the opening.
- 5. The device of Claim 2 wherein the connecting medium is in the opening.
- 6. The device of Claim 1 wherein the connecting medium is in the range of about 10 micrometers to about 100 micrometers thick.
- 7. The device of Claim 1 wherein the connecting medium is about 50 micrometers thick.
- The device of Claim 1 wherein the connecting medium comprises a 8. hydrogel.



10. The device of Claim 1 wherein the connecting medium comprises a form selected from the group consisting of a gel, a solid and a powder.

- 11. The device of Claim 1 wherein the connecting medium further comprises a matrix material.
- 12. The device of Claim 1 wherein the protrusions comprise blades.
- 13. The device of Claim 12 wherein at least one of the plurality of blades comprises means for anchoring the device to the body surface.
- 14. The device of Claim 1 further comprising an agent delivery device connected to a second side of the member, the agent delivery device selected from the group consisting of an electrotransport device, a passive device, an osmotic device, and a pressure driven device.
- 15. The device of Claim 14 wherein the agent is selected from the group consisting of a gene, a polypeptide, and a protein.
- 16. The device of Claim 1 further comprising a sampling device connected to a second side of the member, the sampling device selected from the group consisting of a reverse electrotransport device, a passive device, and an osmotic device.
- 17. The device of Claim 16 wherein a sampled agent is selected from the

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group consisting of body electrolytes, illicit drugs and glucose.

- 18. A device for introducing or withdrawing an agent through a body surface, the device comprising:
- a plurality of protrusions extending from a first side and an opening through the device between the protrusions; and
- a connecting medium capable of storing the agent therein or passing the agent therethrough being predisposed in the opening.
- 19. The device of Claim 18 wherein the connecting medium is predisposed on a portion of the first side.
- 20. The device of Claim 18 wherein the agent is selected from the group consisting of a gene, a polypeptide, and a protein.

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- 21. The device of Claim 18 wherein the connecting medium comprises a hydrogel.
- 22. The device of Claim 18 wherein the connecting medium is preloaded with an agent to be delivered through the body surface.
- 23. A method for introducing or withdrawing an agent through a body surface, comprising the steps of:

piercing the body surface with a plurality of protrusions extending from a first side of a member having a connecting medium capable of storing the agent therein or passing the agent therethrough on at least a portion of the first side;

contacting the body surface with the connecting medium; and passing the agent through the body surface.

- 24. The method of Claim 23 wherein the passing step comprises:
 administering the agent by a method selected from the group consisting of electrotransport, passive delivery, osmosis, and pressure.
- 25. The method of Claim 23 wherein the passing step comprises: sampling the agent by a method selected from the group consisting of reverse electrotransport, passive sampling, and osmosis.

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